Appendix 6-1.

Evaluation Criteria Comparisons

Memorandum



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Subject: Evaluation Criteria Comparisons

This memo summarizes the similarities and differences between the evaluation criteria that have been developed for the CTIP and those developed for the City's Capital Improvement Program (CIP). The memo also reports the results of evaluating a sample list of CTIP projects against both sets of criteria.

Proposed CTIP Evaluation Criteria

The CTIP has developed the following set of evaluation criteria to screen and prioritize the potential improvement projects in the CTIP study area. These criteria have been recommended by the CTIP consultant and were reviewed by the Northgate Stakeholder Transportation Subcommittee:

- 1. Safety
- 2. Neighborhood livability
- 3. Pedestrian mobility
- 4. Bicycling mobility
- 5. Transit rider mobility
- 6. Auto driver mobility
- 7. Cost-effectiveness and implementation feasibility
- 8. Housing and economic development
- 9. Infrastructure preservation/maintenance
- 10. Environmental sustainability

The CTIP consultant also recommended that the evaluation criteria be weighted based on the relative importance among them. The recommended relative weights among the evaluation criteria, totaling 100 points, are shown below:

Evaluation Criteria	Weight	Maximum Point
Safety	4	20
Neighborhood Livability	3	15
Pedestrian Mobility	2	10
Bicycling Mobility	2	10
Transit Rider Mobility	2	10
Auto Driver Mobility	2	10
Cost-effectiveness and Implementation Feasibility	2	10
Housing and Economic Development	1	5
Infrastructure Preservation/Maintenance	1	5
Environmental Sustainability	1	5
Total Maximum Point		100

Proposed CIP Project Prioritization Criteria

In February 2005, the SDOT developed draft evaluation criteria that would be applied to potential CIP projects. Those proposed evaluation criteria, which are listed below, include seven categories that total 100 points.

- 1. **Safety** -20 points
- 2. **Mobility improvements** 15 points
- 3. **Preserving/maintaining infrastructure** 15 points
- 4. **Cost effectiveness** 15 points
- 5. Comprehensive Plan/ Urban Village land use strategy 15 points
- 6. **Improving the environment** 10 points
- 7. **Economic development** 10 points

Major Differences

The CIP criteria include the Comprehensive Plan/Urban Village land use strategy criterion, not included as part of the CTIP evaluation criteria. For the CTIP, this is not an issue since by definition the CTIP is intended to implement the Comprehensive Plan/Urban Center land use vision within the Northgate area. Therefore, the CTIP assumes that all potential improvements identified through the CTIP process would support this CIP criterion.

Conversely, the CTIP includes the Neighborhood Livability criterion where the CIP does not. This criterion reflects the concerns and desires expressed by the Northgate Stakeholder Group. This criterion will be evaluated based on the following performance objectives:

- Reduce excessive through-traffic volumes on residential streets.
- Minimize increased traffic volumes on adjacent streets as a result of any action that is proposed.
- Keep vehicle speeds at 25 mph or less on residential streets.
- Reduce risks of pedestrian and bicycle collisions with vehicles on arterials and residential streets.

An additional difference between the sets of criteria is that the CTIP separates the mobility category among the transportation modes: auto, pedestrian, bicycle and transit, where the CIP allocates 15 points for mobility. Under the CIP, a high score is given to a project where it reduces congestion, improves the flow of traffic and provides access and mobility benefits to multiple modes, including transit, pedestrians, bicyclists and freight. CTIP improvement projects are initially evaluated with a single mode focus. After the CTIP projects are evaluated and screened, the CTIP projects located within an adjacent location may be packaged so that the improvement project package would provide benefits to the multiple modes. Generally, the CTIP criteria would provide higher score to a project that provide a high degree of benefit to the multiple modes.

Example Evaluation with CTIP and CIP Criteria

The CTIP consultant selected following four potential improvement projects and rated them with the CTIP evaluation criteria and the CIP project selection criteria:

- Add left turn pockets on all approaches at the NE 130th Street/ Meridian Avenue NE intersection
- Provide walkways on both sides of 115th Street between 5th Avenue NE and Lake City Way
- Add an additional westbound-to-southbound left turn lane at the Northgate Way and 5th Avenue NE intersection
- Stripe bicycle lanes on the existing curb lanes on both sides of College Way between N 105th Street and N 92nd Street

Tony Mazzella and Tom Noguchi rated these four potential projects using the CTIP and CIP criteria definitions. The results are shown in **Table 1**.

Conclusion

- 1. It appears that the total score with the CTIP criteria and their weights are similar to that with the CIP criteria.
- 2. It is possible that major roadway projects that aimed at reducing traffic congestion in the CTIP area might gain slightly more points through the CIP process than

with the CTIP criteria, if they support the Comprehensive Plan/ Urban Village visions.

3. The pedestrian facility improvements located in the residential neighborhoods within the CTIP area might gain slightly more points with the CTIP criteria due to the neighborhood livability criteria.

Table 1. Example Results Scored with CTIP and CIP Criteria

Table 1. Example Results	Add left turn all approach 130 th Street/ Avenue NE i	pockets on es at the NE Meridian	Provide walk both sides o Street betwe	f 115 th een 5 th	southbound left turn lane at the Northgate Way		Stripe bicycle lanes on the existing curb lanes on both sides of College Way between N 105 th Street and N 92 nd Street	
	CTIP	CIP	CTIP	CIP	CTIP	CIP	CTIP	CIP
Safety	20	20	20	20	0	0	20	20
Neighborhood livability	0		9		0		0	
Pedestrian mobility	4		8		0		4	
Bicycling mobility	0	5	0	3	0	7	10	7
Transit rider mobility	0		0		2	,	-4	,
Auto driver mobility	2		0		8		0	
Cost-effectiveness and implementation feasibility	4	7	4	7	-2	0	10	15
Comprehensive Plan/ Urban Village land use strategy		0		9		7		0
Housing and economic development	0	0	0	0	2	4	0	0
Infrastructure preservation/ maintenance	0	0	0	0	0	0	0	0
Environmental sustainability	0	0	-1	0	0	0	2	2
Total	30	32	40	39	10	18	42	44

Appendix 6-2.

CTIP Proposed Improvement Concept Scores

Project #	Project Description	Evaluation Score
C-2	Add bike lanes and sidewalks on both sides of Meridian Avenue N from N 115th Street to N 122nd Street.	55
	N 117th St from 1st Ave N to Meridian Ave N: Add a raised walkway on the north side of the street and place speed humps (cushion)	51
	Provide curbs, gutters and sidewalks on both sides of NE 125th Street from 5th Ave NE to Roosevelt Way	47
	Upgrade the intersection of NE 125th St./ Roosevelt Way/ 10th Ave NE and include the stop controlled 125th St intersection to be a part of the signal controlled intersection	46
B-1	NE 115th St from 5th Ave NE to Lake City Way: Provide raised walkway on one side of the street. Restrict on-street parking to one side.	45
D-3	Provide a walkway on one side of the street on 8th Ave NE from Northgate Way to NE 92nd Street. Install appropriate traffic calming devices.	45
B-2	Analyze pedestrian crossing conditions on 8 th Avenue NE between NE Northgate Way and NE 115 th Street. If consistent with SDOT guidelines and practices, install pedestrian crossing improvements	44
	Provide raised walkway on one side of NE 98th St from 15th Ave NE to Lake City Way. Allow on-street parking. Integrate traffic control devices with the sidewalk improvements.	43
D-1	Provide curbs, gutters and sidewalks on both sides of NE 92nd Street from 1st Ave NE to 5th Ave NE	42
E-4 E-5	Add a new access driveway to the 3rd Avenue NE alignment at the Northgate Way/3rd Avenue NE intersection and eliminate the existing semicircular, two-intersection Northgate Mall driveway. It may require widening of 3rd Avenue north of Northgate Way to align the approach lane with the Northgate Mall side. Provide crosswalks on all legs at the Northgate Way/3rd Avenue NE intersection. Place barriers at the edge of the north sidewalk or in the median (possibly landscaping) between 3rd Avenue NE and 5th Avenue NE to discourage mid-block street crossings by pedestrians.	42
⊔ 1	Analyze pedestrian crossing conditions, including pedestrian demand and adjacent land uses, on Roosevelt Avenue NE between NE 90 th Street and NE 94 th Street through the neighborhood business district. If consistent with SDOT guidelines and practices, install pedestrian crossing improvements	39
F ₋ 7	Reconstruct the existing sidewalk on the east side of 1st Avenue NE from NE 92nd Street to NE 97th Street and provide a bicycle lane on the west side of 1st Avenue (by extending the shoulder by 4 feet) between NE 103rd Street and NE 92nd Street.	39
C-7	Allow westbound left turns from Northgate Way to southbound Corliss Avenue at the SB I-5 Off Ramp/Corliss Ave/ Northgate Way intersection. Extend the westbound left turn lane on Northgate Way under I-5 Overpass by placing sidewalks behind the columns	35

Project #	Project Description	Evaluation Score
C-9	Provide a roundabout at the southbound I-5 On Ramp/Corliss Avenue N/ N 107th Street intersection. C-9, C-10, C-11 and J-5 work together to form an alternative westbound route to Meridian Avenue.	35
C-10	Provide a roundabout at the Meridian Ave N/ N 107th St intersection	35
C-11	Provide curbs, gutters and sidewalks on N 107th Street from Meridian Ave N to Corliss Ave N/ SB I-5 On Ramp	35
E-6	Add a second westbound left turn lane on NE Northgate Way at 5th Avenue by widening the south side of Northgate Way from approximately 8th Avenue to 3rd Avenue. Assign southbound curb lane to right turns only. Re-align the southbound through lane and eliminate the "offset" condition Provide urban design treatments for pedestrian crossings at the Northgate Way/5th Ave NE intersection	35
A-1	Add left turn pockets on all approaches at the N 130th/Meridian Ave N intersection	34
G-1	Add curbs, gutters and sidewalks on both side of the street on 15th Ave NE from NE 92nd St to NE 117th St	33
C-8	Provide a median and restrict mid-block left turns on Northgate Way N from Meridian Ave N to Corliss Ave N/I-5 Off Ramp where a break in the median may be allowed. Investigate feasibility of providing a business access street south of Northgate Way.	32
C-1	Add bike lanes or widen shoulders to accommodate bike traffic on 1st Ave NE from N 117th St to N 130th St	32
E-7	Provide medians and restrict mid-block left turns on Northgate Way from 5th Ave NE to Roosevelt Way NE. Accommodate U-turns at intersections.	32
I-2	Stripe bike lanes on 5th Ave NE from NE 115th St to NE 125th St	32
A-4	Signalize the I-5 northbound off ramp and 5th Ave NE intersection and coordinate this signal with the 5th Ave NE/NE 130th St intersection signal	31
G-2	Provide a roundabout at the Pinehurst Way NE/ NE 115th St/ 12th Ave NE intersection	31
G-4	Install a mid-block or intersection pedestrian crossing with pedestrian signal on 15th Ave NE between NE 120th St and NE 122nd St	28
G-3	Install a signal and modify the intersection geometry at the 15th Ave NE/NE 117th St/ Pinehurst Way NE intersection	28

Project #	Project Description	Evaluation Score
G-5	Reconstruct intersection with north-south left turn pockets at the Northgate Way and 15th Ave NE intersection	26
C-4	Provide bicycle lanes on both sides of Meridian Avenue N from N 100th Street to N Northgate Way.	26
C-5	Provide bicycle lanes on both sides of College Way from N 92nd Street to N 100th Street by converting the curb lanes to bicycle lanes. Work with Metro to ensure that transit service standards for speed and reliability of service are maintained.	26
C-3	Install a traffic signal at the N 115th St/ Meridian Ave N intersection	25
A-3	Add a eastbound left turn pocket at the 5th Ave NE and NE 130th St intersection	23
E-1	Coordinate all signals and optimize signal operation for peak, non-peak weekdays and weekend days based on vehicle volumes on Northgate Way	23
F-1	Add an westbound right turn lane and implement the intersection improvement concept prepared by King County Metro at the NE 103rd Street/ 1st Ave NE intersection	22
F-3	Allow eastbound left turns from the existing curb lane at the NE 103rd St/ 5th Ave NE intersection	21
A-2	Add a westbound left turn pocket at the I-5 southbound on-ramp and NE 130th St intersection	19
C-12	Utilize the DPD Open Space/Pedestrian Plan for design treatments that enhance the pedestrian connection on Northgate Way between Corliss Avenue N and 1st Avenue NE particularly under I-5. A key CTIP recommendation is to place the sidewalks behind the I-5 bridge columns. This project should be implemented together with C-7, C-9 and C-10 as a package.	19
E-8	Replace the existing pedestrian signal with a traffic signal and allow left turns on all approaches at the Northgate Way/8th Ave NE intersection	19
I-1	Extend NB right turn lane on 5th Ave NE south of Northgate Way to NE 106th St	17
A-7	Upgrade the existing signal at the NE 125th St / 15th Ave NE intersection	16
D-2	Install a signal at the NE 92nd Street and 1st Ave NE intersection	15

Project #	Project Description	Evaluation Score
E-2	Modify westbound approach – curb lane: right and I-5 on-ramp, 2nd lane: I-5 on-ramp and through, and 3rd lane: through only at the Northgate Way/1st Ave NE/ I-5 On Ramp intersection. Widen the on-ramp to have two lanes on Northbound I-5 On Ramp from Northgate Way	7
C-6	Add double left turn lanes on westbound Northgate Way at the intersection with Meridian Avenue N	1
E-3	Monitor safety performance of westbound traffic on Northgate Way approaching 1st Ave intersection to determine the future channelization improvements.	Not Scored
F-2	Install a signal at the NE 103rd St/ 3rd Ave NE intersection	Not Scored
F-4	Construct a three-lane roadway on 3rd Ave NE from NE 100th St to NE 103rd St	Not Scored
F-5	Add four-way stops and install a signal at the NE 100th St/ 3rd Ave NE intersection, if needed in the future	Not Scored
F-6	Provide sidewalks on the north side of the street on NE 100th St from 1st Ave NE to 5th Ave NE	Not Scored
J-1	Increase transit services from the neighborhoods to Transit Center/ Link Light Rail Station by providing Community Circulator	Not Scored
J-2	Increase mid-day transit services from Northgate to University District.	Not Scored
J-3	Improve transit services all day to Urban Villages such as Bitter Lake, and Aurora-Licton Springs areas.	Not Scored
J-4	Facilitate development of a "parking brokerage" function to efficiently allocate parking needs through shared use of parking spaces. This function could be managed by a new or existing association of employers and property owners, a Chamber of Commerce, or a Transportation Management Association (TMA).	Not Scored
J-5	Re-classify Corliss Avenue from Northgate Way to N 107th Street and N 107th Street from Corliss Avenue N to Meridian Avenue N as collector arterials.	Not Scored